

FURTHER AMPLIFICATION AND CLARIFICATION OF ISSUES RELATING TO LANDFORM RESTORATION

**by
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The impact on aquatic habitat and the elimination of streams through the valley fill process is really secondary and only provided the legal “hook” to those opposed to current practices of Mountain Top Removal/Valley Fills. It has been my observation that the primary and more fundamental issue is, what is perceived by a large segment of the public as the destruction, the “flattening out” of an existing, pristine, mountainous topography with the concurrent loss of the entire biological habitat on a fairly significant scale.

Current reclamation practices do not typically:

- ?? restore a natural topography – mountain tops and valleys and the associated topographic relief
- ?? restore a natural hydrologic system, they only “control” drainage
- ?? restore streams but, build engineered ditches
- ?? re-vegetate the reclaimed forms to their original or approximate original condition; distribution of trees, shrubs and ground cover species is not done by aspect or by elevation but, rather uniform and standardized; single groundcover mix is optimized for quick germination, dense coverage and erosions prevention often preventing success of other plant and tree species

All of the above objectionable practices can be mitigated if the industry and its regulatory agencies are willing, and some issues have already been addressed by some companies. Reclamation efforts at the Sample and Holbert Mines demonstrated that the industry is capable of restoring the mountaintop component of the original landforms and they need to be commended for their efforts.

Not only does it recapture an aesthetic element of West Virginia’s topography, it is also reported to be more cost effective than conventional practices in drag line operations. It further controls erosion on constructed fill slopes without unsightly, traditional benching techniques by breaking the man made topography into smaller, none-erosive tributary drainage areas - just like in nature.

In terms of landform restoration, we are half-way there!

However, the element, even with their efforts, that is still missing, is the recreation of the valley form. Some of their spoil fills (parts of the recreated ridge tops) are actually stacked on top of valley fills. Valley fills need to be significantly depressed so that there can be a more gradual transition of the valley floor downstream from the fill segment to the undisturbed natural valley/stream. Mountain top fill heights are then increased to make up for loss of the valley’s holding capacity.

Valleys are the foundation for streams. They are the collectors of both surface and subsurface drainage, they capture, hold, concentrate and channel the water and together with

the topography and vegetative cover become part of the overall aesthetic natural landscape of any mountainous terrain.

You can't have streams without valleys forms, you can only build drainage ditches or, as Dr. Handel put it so well, build plumbing devices.

I believe that the loss of the valley form with its associated stream habitat through the filling process, appears to be the most serious and objectionable element in the public's perception. It is only through ways of restoring this landform component with its habitat that we can hope to find a middle ground to resolve the controversy, or valley fills may become highly restrictive, if not off limits entirely.

It would be unfortunate if, because of the inflexibility of the industry, a court's ruling would set reclamation practices rather than the technical expertise and the creative minds of the industry itself and the cooperation of regulatory agencies. It is recognized that this will require different design techniques, construction processes and maybe even machinery to achieve this objective but, that has been done before as this industry evolved from underground to surface operations.